

POLREP 68  
NanoChemonics Site  
4 Magnox Drive  
Pulaski, Pulaski County, Virginia 24301

Lat: N 37.04718  
Long: W 80.79146

ATTN: RRC  
VADEM -Tolbert  
VADEQ - Lohman  
EPA - G. Heston

I. SITUATION (September 26, 2014 to December 8, 2014)  
EVENT: Site Cleanup Operations

- A. Refer to previous Polreps for site background information.
- B. STNP, the owner of the NanoChemonics property, is conducting a response action and cleanup of the Site under an EPA order. The Administrative Settlement and Order was signed on April 8, 2011, and response actions continue. In brief, the response action involves the removal of hazardous substances from the Site and included the removal of such substances found in the debris created during demolition of the buildings at the Site. The action also includes the management of wash waters and storm waters at the Site that migrate towards lagoons and then into nearby Peak Creek.
- C. The response actions related to the lagoons and drying bed began on September 25, 2013. Sludge was removed from the four lagoons and placed into the drying bed for dewatering and drying. The closure of the four lagoons was deemed to be complete by EPA during an inspection conducted on March 13, 2014. The closure of the drying bed remains to be completed.

II. ACTIONS

- A. STNP contractor ARG mobilized to the Site on October 29, 2014 to commence closure of the drying bed in accordance with revised procedures proposed by STNP and approved by EPA. The EPA OSC and STNP contractor Mid Atlantic Associates (MAA) were also onsite on October 29<sup>th</sup> to observe the closure operations. A significant amount of wet clay/sludge (C/S) was encountered in the southwestern quadrant and in the northern portion of the drying bed and the bulldozer became stuck in those areas when attempting to spread the C/S. MAA mobilized an excavator to the Site to excavate the wet C/S and place into wind rows to dry. MAA used the bulldozer to mix shale from the drying bed berm with the C/S and place it in lifts in the drying bed. The EPA START contractor was onsite for the week to observe and document the closure activities. MAA and START demobilized for the weekend on October 31, 2014.

- B. MAA re-mobilized to the Site to continue drying bed closure activities on November 3, 2014. MAA also mobilized a dump truck to the Site and used it to haul shale material from the facility hill side and placed it into the drying bed to be mixed with the C/S. MAA used the bulldozer to mix the shale with the C/S that had been placed in wind rows and placed the material in the drying bed in lifts. MAA used the excavator to dig out the remaining wet C/S in the northeastern quadrant of the drying bed and place it in wind rows to dry. MAA determined that much of the C/S was too wet to enable placement to meet compaction requirements, even with the addition of the shale. Two loads of lime were delivered and mixed with the C/S in a portion of one of the four wind rows to determine its effectiveness as a drying agent. A final determination of the effectiveness and optimum procedures for mixing the lime and C/S was not made. The STNP contractors made a determination that the C/S needed to be allowed to dry in the wind rows before the drying bed closure could be completed. MAA demobilized along with all the equipment on November 6, 2014. The EPA START contractor was also onsite during the week to observe and document the closure activities.
- C. The OSC and MAA discussed the situation and the OSC agreed that additional drying was necessary before effective conclusion of the response action in the lagoon area can occur. MAA and the OSC will periodically evaluate the progress of drying, but it is estimated that such activity may not re-initiate until summer 2015.
- D. EPA has established a public repository of site documents at the local library in Pulaski. EPA will also provide public information updates for the site on the EPA site website at: [www.epaosc.org/nanochemonics](http://www.epaosc.org/nanochemonics).

### III. FUTURE ACTIONS

- A. It is anticipated that STNP will remobilize to the Site in Spring 2015 to take actions to expedite the drying process or complete the response action. The final closure activities will include final placement of sludge in the drying bed, installment of a soil cover, Site restoration of the lagoon/drying bed area, and removal of the silt fence.
- B. Additional storm water sampling will be conducted by STNP and EPA to evaluate the effectiveness of additional cleanup activities and caulk removal on the MO pad.
- C. EPA will continue providing on-site oversight of remediation activities conducted by STNP.

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Michael Towle  
On-Scene Coordinator  
EPA Region III  
Philadelphia, PA